UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,190	01/18/2001	Nadarajah Asokan	442-010093-US(PAR)	6855

7590 08/10/2004

Clarence A. Green
PERMAN & GREEN, LLP
425 Post Road
Fairfield, CT 06430

EXAMINER	
WILSON, ROBERT W	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/765,190	ASOKAN ET AL.	
	Examiner	Art Unit	
	Robert W Wilson	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 16-27* is/are rejected.

7)☒ Claim(s) *14 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6-9*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.0 The application of Aokan et. al. entitled "ADDRESS ACQUISITION" which was filed on 1/18/2001 with foreign priority based upon FINLAND 20000121 dated 1/10/2000 was examined. Claims 1-27 are pending.

Claim Rejections - 35 USC § 103

2.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.0 **Claims 1-13, 16, & 19-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over "IPv6 Stateless Address Autoconfiguration", RFC 2462 dated December 1998 which is an IDS document of record.

Referring to **Claim 1**, RFC 2462 teaches: A method of acquitting a network address in a communication network (The host interface acquires an IPv6 IP address or network address per Pgs 1-4 & 7-17) the method comprising the steps of:

Establishing an entity comprising information on a network addresses within a subnetwork (Neighboring nodes and routers are entities which know which addresses have been assigned per Pg 8 Para 4 or Pg 10 Para 5 or Pgs 1-4 & 7-17)

Creating a link with a link identifier unique within the subnetwork between the first node and a second node (A node or first node creates a link identifier which it believes as unique and sends out a Neighbor Solicitation message to a second node n order to verify if the link identifier is unique per Pg 8 Para 4 or Pg 16 Para 5.5 or Pgs 1-4 & 7-17)

Determining a network address for the first node on the basis of the link identifier (The node or first node determines a IPv6 address once it ascertains that the link-local address is unique per Pg 8 Para 4 or Pgs 1-4 & 7-17)

Checking by the entity whether the determined network address is unique (Neighbor Solicitation messages are sent to both nodes and routers wherein the nodes and routers check for duplicate

addresses per Pgs 1-4 & 7-17); and accepting the network address if the network address if the determined network address is unique (The nodes and router upon receipt of a Neighbor Solicitation message determines if the address is a duplicate address. If the address is not a duplicate address then the nodes and routers accept the address of the first node as unique per Pgs 1-4 & 7-17)

The RFC 2462 does not expressly call for: a entity but teaches a function performed by the nodes and routers. The nodes and router perform a Duplicate Address Detection algorithm. If the link identifier is determined to be unique by both the nodes and routers then the first node determines it network address. If the address is not a duplicate address then the nodes and routers then the first node accepts the address as unique or performs the same function as the entity per Pgs 1-4 & 7-17

It would have been obvious to one of ordinary skill in the art at the time of invention that the nodes and routers perform the same function as the entity.

In Addition RFC 2462 teaches:

Regarding **Claim 2**, in the link identifier is generated statically based on information identifying one of the nodes (The applicant broadly claims "statically". The examiner interprets that the link identifier can be defined based upon EUI-64 identifiers or manually configured per Para 5.3 per Pgs 12-13)

Regarding **Claim 3**, in which the link identifier is generated randomly by one of the nodes (The applicant broadly claims "generated randomly". The applicant has not defined in the claim what is meant by random. The examiner interprets a nodes selection of a link identifier as the link identifier is "generated randomly" prior to sending the Neighbor Solicitation message per PGs 1-4 & 7-17)

Regarding **Claim 4** in which the information on a network address is a list of link identifier or network address in the subnetwork (The applicant broadly claims information on a network address list. The examiner interprets the ability of nodes and routers to assess whether an address is a duplicate address or unique address is based upon information on an network address or list of link identifiers which is stored in each node and router respectively per Pgs 1-4 & 7-17)

Regarding **Claim 5**, in which the list comprise link identifier which have previously been assigned to nodes (The applicant broadly list comprise link identifier which have previously been assigned to nodes. The examiner interprets the ability of nodes and routers to assess whether an link identifier has been previously assigned is based upon a link list store in each node and router respectively per Pgs 1-4 & 7-17)

Regarding **Claim 6**, in which uniqueness checking is accomplished by the entity referring to the list of previously assigned link identifiers or network addresses (It would have been obvious to one of ordinary skill in the art at the time of the invention that the nodes and routers would refer

to a list of previously assigned link identifiers or network address in order to assess if address is a duplicate address upon receipt of a Neighbor Solicitation message per Pgs 1-4 & 7-17)

Regarding **Claim 7**, in which uniqueness checking is carried out by the entity referring to a routing table (Routers assess whether the address is unique. It would have been obvious to one of ordinary skill in the art at the time of the invention that the routers utilizes a table in the router or routing table in order to determine if the address is unique per Pgs 1-4 or 7-17)

Regarding **Claim 8**, in which the uniqueness checking is carried out by the entity referring to a neighbour cache (It would have been obvious to one of ordinary skill in the art at the time of the invention that the neighbour nodes must verify the uniqueness of address via a table in each neighbour node in order for the invention to work. The applicant has broadly claimed a "neighbour cache". The examiner has interpreted the table in the node in which the addresses are verified as a "neighborhood cache" per Pgs 1-4 & 7-17)

Regarding **Claim 9**, in which the list comprises link identifier which are unique and has not previously been assigned (It would have been obvious to one of ordinary skill in the art at the time of the invention that the node which sends out a Neighbor Solicitation message sends out a request which the node believes is unique and which has not been assigned. It would have been obvious to one of ordinary skill in the art at the time of the invention that the nodes perform this function in order to send on a Neighbor Solicitation message in which the node believes it's identifier is unique per Pgs 1-4 & 7-17)

Regarding **Claim 10**, in which the uniqueness checking is accomplished by the gateway selecting a link identifier or a network address from the list of link identifier or network addresses which have not yet been assigned (The applicant broadly claims "gateway". The examiner has interpreted the neighbor node as the gateway that checks for uniqueness per Pgs 1-4 or 7-17).

Regarding **Claim 11**, in which the information is that the entity has an identifier which can used to create a unique network address (The applicant broadly claims "entity". The examiner interprets that each node performs the task of entity by creating an identifier which can be used to create a unique network address per Pgs 1-4 & 7-17)

Regarding **Claim 12**, in which the uniqueness checking is accomplished by the entity referring to the information on network addresses in contains and determining that is has a link identifier which can used to create a unique network address (It would have been obvious to one of ordinary skill in the art at the time of the invention that each node performs the function of uniqueness checking prior t determining that the identifier is unique per Pgs 1-4 & 7-17)

Regarding **Claim 13**, in which the link identifier is transferred between the first and second nodes from a sender to a recipient (The applicant broadly claims "link identifier is transferred between the first and second node". The examiner interprets that the first node sending a

Neighbor Solicitation message to a second node n order to verify if the link identifier is unique is transferring a link identifier between a first and second node per Pgs 1-4 & 7-17)

Regarding **Claim 16**, in which the network address is derived form a the link identifier and a network prefix (Pgs 1-4 & 7-17)

Regarding **Claim 19**, in which there are a plurality of network prefixes used to create a plurality of network addresses for a node (Each node has a plurality of IPv6 prefixes per Pgs 1-4 & 7-17)

Regarding **Claim 20**, in which the network comprises a plurality of subnetworks (The applicant broadly claims "subnetworks". It would have been obvious to one of ordinary skill in the art at the time of the invention any network containing routers also contains subnetworks per Pgs 1-4 & 7-17)

Regarding **Claim 21**, in which the first node is a mobile station (The reference teaches that this a method of assigning addresses to interfaces in a host. The examiner takes official notice that it is well known in the art at the mobile unit is a host. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the method of assigning network addresses to the interface on a mobile unit because it is a host.)

Regarding **Claim 22**, in which the second node is a gateway (The applicant has broadly claimed the second node is a gateway. The examiner interprets that the second node verifies the uniqueness of the link address; thereby, acting as a gateway for establishment of the network address per Pgs 1-4 & 7-17)

Regarding **Claim 23**, in which the communication network is a GPRS system (The primary reference teaches how IPv6 can be deployed. The examiner takes official notice that usage of IPv6 is well known in the art in mobile and GPRS systems per col. 1 lines 55-col. 4 line 2 and Fig 2 or col. 5 lines 30-67. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the method of assigning an host address in an IPv6 system in order to be standards compliant.)

Regarding **Claim 24**, in which the links is PDP context (The applicant broadly claims the link is PDP context. The examiner interprets the node sending a Neighbor Solicitation Message and subsequent determination that the address as the link is PDP context per Pgs 1-4 & 7-17)

Regarding **Claim 25**, in which the network address is a IPv6 address (IPv6 address per Pgs 1-4 & 7-14)

Referring to **Claim 26**, A communications network (interconnected nodes and routers in the Internet or communication network per Pgs 1-4 & 7-17)

A subnetwork (The applicant broadly claims "subnetwork". The examiner interprets the interconnection between nodes as a subnetwork per Pgs 1-4 & 7-17)

A first node and a second node (a first node sends a Neighbor Solicitation Message to second node per Pgs 1-4 & 7-17)

An entity being able to create a link with a link identifier unique within the subnetwork between the first node and the second node and to determine a network address for the first node on the basis of the link identifier (The applicant broadly claims "entity". The reference teaches that the first node has the ability to determine the define a link identifier then the first node sends out a Neighbor Solicitation message to other nodes and routers so that the Duplicate Address Detection algorithm can be performed. If the link identifier is determined to be unique by both the nodes and routers then the first node determines it network address per Pgs 1-4 & 7-17)

Wherein the entity is able to check whether the determined network address is unique and to accept the network address if the determined network address is unique (The nodes and router upon receipt of a Neighbor Solicitation message determines if the address is a duplicate address. If the address is not a duplicate address then the nodes and routers accept the address of the first node as unique per Pgs 1-4 & 7-17)

The RFC 2462 does not expressly call for: a entity but teaches a function performed by the nodes which defines a link identifier then the first node sends out a Neighbor Solicitation message to other nodes and routers so that the Duplicate Address Detection algorithm can be performed. If the link identifier is determined to be unique by both the nodes and routers then the first node determines it network address. Next nodes and router upon receipt of a Neighbor Solicitation message determine if the address solicited is a duplicate. If the address is not a duplicate address then the nodes and routers then the first node accepts the address as unique or performs the same function as the entity per Pgs 1-4 & 7-17

It would have been obvious to one of ordinary skill in the art at the time of invention that the first node performs the same function as the entity.

In Addition RFC 2462 teaches:

Regarding **Claim 27**, A mobile terminal to operate with the communications network of claim 26 (The primary reference teaches a method of creating an IPv6 address for a host interface. The examiner takes official notice that it is well known in the art that a mobile can be a host as well as utilize IPv6. It would have been obvious to one of ordinary skill in the art at the time of the invention to assign an IPv6 address to the mobile host interface in order for the mobile host to communicate with the network)

Claim Rejections - 35 USC § 112

4.0 The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5.0 **Claims 1-25** are rejected relative to 112/2nd paragraph because the metes and bounds of the claims cannot be assessed.

Referring to **Claim 1**, the claim states "establishing an entity" and "checking an entity". Are both entities the same entity or different entities?

Referring to **Claims 11 and 12**, the applicant utilizes the wording "can used". The examiner first assumes that the applicant means "can be used". The examiner interprets "can be used" as indefinite. What is meant by "can be used"?

Referring to **Claims 17 & 18**, Both claim 17 and 18 are dependent claim apparatus claims which refer back to claim 16 which is a method claim. Is the applicant claiming a means or apparatus or a method?

Claim Objections

6.0 **Claims 17 & 18** are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Both claim 17 and 18 are dependent claim apparatus claims which refer back to claim 16 which is a method claim. The applicant needs to cancel the improper dependent claims rewrite the claims as an independent apparatus claim. .

Claim Objections

7.0 **Claims 14 & 15** would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations

of the base claim and any intervening claims.

The present invention is directed to a first node or sending a identifier to a 2nd node or recipient wherein the 2nd node or recipient verifies if the link identifier is unique and if it is not unique generates a different link identifier for the first node that is unique. Also the second node or recipient can choose another link address and send it to the sender.

The closest prior art is RFC 2462 which is an IDS document of record. RFC 2462 teaches first node send an identifier to a 2nd node or recipient wherein the 2nd node or recipient verifies if the link identifier is unique and if the link identifier is not unique a message is sent back to the node stating that the identifier is not unique.

The closest prior art RFC 2462 does not either singularly or in combination anticipate or render the following claim limitation obvious when the dependent claim is rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims:

"In which the recipient of the link identifier discards it an generates a different link identifier which is checked for uniqueness" as claimed in **Claim 14**.

"In which if the link identifier is not unique, the recipient chooses a unique link identifier which it sends to the sender" as claimed in **Claim 15**.

Conclusion

8.0 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Robert W. Wilson

Robert W Wilson
Examiner
Art Unit 2661

RWW
July 27, 2004

Douglas W. Olms

DOUGLAS OLMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600